Fitness Tracker Enhanced

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CST-451 Capstone Requirements

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Abstract

This document goes over user stories/use cases, system top-down design, system logic, screen definitions, and security. Again, this is designed to be a simple to use fitness tracker for the everyday person.

User Stories/Use Case

|  |  |  |
| --- | --- | --- |
| Title: want to track fitness | Priority: medium | Estimate: 120 hours |
| User Story:  Kevin: Kevin is in good shape but has body goals but does not know how to track his fitness.  Hi, my name is kevin. I am in ok shape naturally, but I want to take it to the next level and really push my body to its limits. Though I do know what I am working out I would love something simple so that I can keep track of all the work outs I do throughout the weeks. This could also help me schedule my work out days as well. | | |
| Acceptance Criteria:  The user has expressed interest in a simple application to help him track his workouts. When this could be implemented is dependent on the development team’s goals and how complex the application is. Then the outcome would be an app that is designed to help the user track his fitness journey. | | |

|  |  |  |
| --- | --- | --- |
| Title: Need help | Priority: high | Estimate: 140 |
| User Story:  Mitch: Mitch is out of shape and needs help with fitness.  Hi, my name is Mitch. I have never worked out a day in my life and I have noticed that I have gained some weight. I do not want to become unhealthy so I want to start working out, but I want something easy that I can track what I do to keep me honest. I feel like an easy-to-use app will help keep my vigilant on getting in shape. | | |
| Acceptance Criteria:  The user has expressed interest in a simple application to help her track workouts and keep them on track. When this could be implemented is dependent on the development team’s goals and how complex the application is. Then the outcome would be an app that is designed to help the user track her fitness journey and keep her on track. | | |

|  |  |  |
| --- | --- | --- |
| Title: Want something easy | Priority: low | Estimate: 100 |
| User Story:  Sasha: Sasha is an avid gym goer but is tired of overpriced fitness apps.  Hi, my name is Sasha. I go to the gym 5 days a week and I am tired of the overly complex fitness apps. I would like something that is simple and lets me keep track of the workouts that I do. I feel like this would also let me see if I am doing too much of the same thing and help me change it up and come up with new ideas for workouts. Or changing my split. | | |
| Acceptance Criteria:  The user has expressed interest in a simple application to help her track her workouts that is not overly complex. This will help them give themselves new Ideas as they continue their fitness journey. As they are already in shape and know how to work out when this is implemented it will simply enhance their already present routine. Then it will also help them create new plans and goals. | | |

Non-functional Requirements:

Based on these user stories and use cases we can derive non-functional requirements:

* Service Levels and Service Level Agreements
  + Based on the user stories the development team can provide a desired service level to the user. As well agree to maintain this service level for as long as the user uses the application.
* On Going Support and Maintenance
  + Through the service level and agreement, the development team will continue to support and maintain the application after launch. Any user reported issue or bugs will be addressed and patched with future releases of the application. As well continuous monitoring will be instituted at a later iteration of the application to ensure support and maintenance for the application.
* Development Standards
  + Based on user stories and user cases the development standards for the application can be derived. The users would like something that is simple to use. With that it will allow the team to build an easy-to-use application that is straightforward and not overcomplicated. Focusing UI/UX experience for the user.

System Design:

Primary functions:

* Create Workout
* Read Workout
* Update Workout
* Delete Workout

Secondary Functions:

* Goals
  + Create Goal
  + Update Goal
* Goal Tracking

Top Down Chart

A diagram of a workflow

Description automatically generated

Technical Requirements

The technical requirements for this project are as follows:

Operating system: Windows

IDE: Visual Studio Code

Frameworks: Express (Backend) React (Front End)

Database: MySQL

The following requirements that are listed above are what will be used in the development of this application. There are no issues with the current hardware that the development team will be using and has all needs met to meet these technical requirements of the application.

System Logic Model

A diagram of a workout

Description automatically generated

The basic system logic that is displayed here goes over what the user will be able to do with the application. Though Goals are secondary to the main function the idea is that it will function like the workouts. Though the primary function of the application is to help people track their workouts.

Reports:

Reports are not applicable to this Application.

Screen Definitions:

The following screen definitions reflect the final stage of the application:

Landing:

A screenshot of a login page

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Registration:

A screenshot of a computer

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Create Workout:

A screenshot of a fitness tracker

Description automatically generated

Workout List:

A screenshot of a computer

Description automatically generated

Update Workout:

A screenshot of a program

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Goals/Goals List:

A screenshot of a computer

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Edit Goal:

A screenshot of a computer

Description automatically generated

Security

Security will be controlled with user registration and authentication. Only registered users will be able to access the application. Upon successful registration user passwords will be hashed in database Development team members will have admin rights with admin logins. Admins will be the only ones that have the ability to update user data in the database. There is no current security issue currently or projected issues with this application.

|  |  |  |
| --- | --- | --- |
| Security Matrix | user | Admin |
| Register | x | x |
| Create Workout | x | x |
| Update Workout | x | x |
| Delete Workout | x | x |
| Read Workout | x | x |
| Create Goals | x | x |
| Update Goals | x | x |
| Read Goals | x | x |
| View Database |  | x |
| Update Datbase |  | x |
| Update user data |  | x |
| Update UI/UX |  | x |